ABSTRACT

There is provided a computer aided design system and a computer aided design program which can greatly increase the

5   utility value of a computer aided design model, and can improve the efficiency of design and production processes, by adopting a curved surface theory which ensures the continuity of a free-form line/free-form surface. A computer executes: a point sequence information extraction process for extracting a

10   plurality of point sequences on a curved surface; a dividing process for generating a curved surface from the point sequences using another computer graphics program, and dividing the curved surface into a predetermined number of meshes; a first fundamental form computing process for

15   computing coefficients of the first fundamental form defined by a tangent vector which forms a tangent plane of the mesh; a second fundamental form computing process for computing coefficients of the second fundamental form defined by the tangent vector and a normal vector of the mesh; and a storage

20   process for storing the point sequence information, the coefficients of the first fundamental form and the coefficients of the second fundamental form.